

Claims

1. A bituminous binder composition comprising:
 - (a) 60 - 99.75 wt.% bitumen;
 - 5 (b) 0.05 - 5.0 wt.% of an elastomer;
 - (c) 0.1 - 30.0 wt.% of a mono-alkyl ester of a vegetable oil or an animal oil;
and
 - (d) 0.1 - 5.0 of an amide additive;based on the total weight of the bituminous binder composition.
- 10 2. Bituminous binder composition according to claim 1, wherein the bitumen is a paraffinic or a naphthenic bitumen with an average penetration of 10 to 350·10⁻¹ mm.
3. Bituminous binder composition according to claim 1 or claim 2, wherein the elastomer is a polymer or a resin comprising two adjacent butadiene units.
- 15 4. Bituminous binder composition according to any one of the preceding claims, wherein the elastomer is a polybutadiene, a butadiene-styrene diblock copolymer, a styrene-butadiene-styrene triblock terpolymer, a isoprene-styrene diblock copolymer or a styrene-isoprene-styrene triblock terpolymer.
5. Bituminous binder composition according to any one of the preceding claims,
20 wherein the composition comprises 0.1 to 4.5 wt.% of the elastomer, based on the total weight of the bituminous binder composition.
6. Bituminous binder composition according to any one of the preceding claims, wherein the mono-alkyl ester of the vegetable or animal oil comprises a C₁-C₄ alkyl ester of an unsaturated fatty acid.
- 25 7. Bituminous binder composition according to claim 6, wherein the mono-alkyl ester of the vegetable or animal oil is a rapeseed methylmonoester, a sunflower methyl monoester, an isomerised sunflower methyl monoester, or a mixture thereof.
8. Bituminous binder composition according to any one of the preceding claims,
30 wherein the bituminous binder composition comprises 0.3 to 25.0 wt.% of the mono-alkyl ester of the vegetable or animal oil, based on the total weight of the bituminous binder composition.

9. Bituminous binder composition according to any one of the preceding claims, wherein the bituminous binder composition comprises a curing agent.
10. Bituminous binder composition according to claim 9, wherein the curing agent is a sulfur-donor compound.
11. Bituminous binder composition according to claim 9 or claim 10, wherein the bituminous binder composition comprises 0.01 to 1.0 wt.% of the curing agent, based on the total weight of the composition.
12. A process for preparing a bituminous binder composition comprising the steps of:
 - (ii) mixing components (b) and (c) at a temperature of 50° to 150°C;
 - (iii) adding at least a part of the mixture as obtained in step (i) to component (a) that has been preheated to a temperature in the range of 100° to 210°C;
 - (iv) adding component (d) to the mixture as obtained in step (ii); and
 - (v) optionally adding a curing agent to mixture as obtained in step (iii).
13. Bituminous binder composition obtainable by the process according to claim 12.
14. Use of a bituminous binder composition according to any one of claims 1 - 11 or 13 in surface dressing, in particular road construction, road renovation, joint filling and sealing purposes.